



rock-pocketbook

Arcidens confragosus

Kingdom: Animalia
Division/Phylum: Mollusca
Class: Bivalvia

Features

The shell of the rock-pocketbook or rockshell mussel is moderately thick, oval, and “inflated.” The anterior end is rounded and the posterior is square or bluntly pointed. The umbo (hump by the hinge) is near the middle of the shell. This appears as numerous low, broad ridges in adults. Two large, pronounced knobs on the umbo extend as folds down the sides of the shell. The outside of the shell is dark green, brown, or black. The inside of the shell is white and iridescent toward the posterior end. Rock-pocketbooks grow up to seven inches long.

Natural History

The rock-pocketbook lives in medium to large rivers in pools and areas of reduced flow in mud and sand. It historically was widespread and common, now it is much less so. Its distribution in Iowa is not well documented. Freshwater mussels have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The fertilized eggs develop into larvae (glochidia) and are stored for a time in the female's gills. When the

glochidia mature, the female generally expels them into the water where they must attach as parasites to the gills or fins of fish. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host and drop to the bottom of the body of water. Hosts for this mussel include gizzard shad, rock bass, white crappie, and freshwater drum. Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

Habitats

Mississippi River

Iowa Status

uncommon; native

Iowa Range

Mississippi River

Bibliography

Iowa Department of Natural Resources. 2001.
Biodiversity of Iowa: Aquatic Habitats CD-ROM.